The Health of New Hampshire's Community Hospital System

A Financial Analysis

Cottage Hospital




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An Important Message to Readers of the Hospital Financial Analysis from the New Hampshire Department of Health and Human Services

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Introduction

The following Hospital Financial Analysis is a byproduct of the December 13 report, *The Health of New Hampshire's Community Hospital System*, issued by the New Hampshire Department of Health and Human Services. The individual financial narratives are part of a series of analyses addressing the financial condition of the state's health care system.

In the following report, you will find an analysis of the hospital's financial well being from 1993-1998, and **then an additional analysis** that covers the most recent period for which information is currently available, 1999. As audited financial statements for 2000 become available from the hospitals, this information will be updated.

Each hospital financial analysis is broken into five sections. These include:

- Background information on the hospital size, location, payor mix and affiliates;
- A Summary of the Financial Analysis;
- A Cash Flow Analysis;
- An Analysis of Profitability, Liquidity and Capital; and
- An Estimation of Charity Care and Community Benefits

Financial Benchmarks

Financial benchmarks include traditional measures of profitability, liquidity, solvency, and cash flow. Each of these areas of analysis is defined below. Additional information about the ratios or the nature of financial analysis can be obtained by consulting health care financial texts (Gibson 1992; Cleverley 1992).

Profitability:	Purpose	Calculation
Total Margin	Measures the organization's ability to cover expenses with revenues from all sources	Ratio of (Operating Income and Nonoperating Revenues)/Total Revenues
Operating Margin	Measures the organization's ability to cover operating expenses with operating revenues	Ratio of Operating Income/Total Operating Revenue
PPS Payment/Cost	Measures the relationship between Medicare PPS payments and Medicare PPS costs; numbers above 1 indicate that payments exceed costs	Ratio of Medicare Prospective Payment System (PPS) Payments /PPS Costs, derived from Medicare Cost Reports
Non-PPS Payment/Cost	Measures the relationship between payment and costs of all payment sources other than Medicare PPS[1]	Ratio of (Total Operating Revenue minus PPS Payments) / (Total Operating Cost minus PPS Costs)
Markup Ratio	Measures the relationship between hospital-set charges and hospital operating costs; generally only self-pay and indemnity payers pay hospital charges	Ratio of (Gross Patient Service Charges Plus Other Operating Revenue) / Total Operating Expense
Deductible Ratio	Measures the relationship between hospital's contractual discounts negotiated with (private payers) or taken by payers (Medicare and Medicaid) and hospital charges	Ratio of Contractual Adjustments/Gross Patient Service Revenue
Nonoperating Revenue Contribution	Measures the contribution of nonoperating revenues (activities that are peripheral to a hospital's central mission) to total surplus or deficit	Ratio of Nonoperating Revenues (includes unrestricted donations, investment income, realized gains (losses) on investments and peripheral activities)/Excess Revenue over Expense
Realized Gains to Net Income	Measures the contribution of realized gains (a subset of nonoperating revenues) to total surplus or deficit	Ratio of realized gains (losses)/Excess Revenue over Expense

[1] Medicare's Prospective Payment System includes only inpatient-related operating and capital costs and excludes Medicare payments for outpatient costs, which have not been part of PPS through 1998

Liquidity:		
Current Ratio	Measures the extent to which current assets are available to meet current liabilities	Current Assets/Current Liabilities
Days in Accounts Receivables	Measures how quickly revenues are collected from patients/payers	Patient Accounts Receivable/(Net Patient Service Revenue / 365)
Average Pay Period	Measures how quickly employees and outside vendors are paid by the hospital	(Accounts Payable and Accrued Expenses)/ (Average Daily Cash Operating Expenses)[2]
Days Cash on Hand	Measures how many days the hospital could continue to operate if no additional cash were collected	(Cash plus short-term investments plus noncurrent investments classified as Board Designated)/(Average Daily Cash Operating Expenses)
Solvency:		
Equity Financing Ratio	Measures the percentage of the hospital's capital structure that is equity (as opposed to debt, which must be repaid)	Unrestricted Net Assets/Total Assets
Cash Flow to Total Debt	Measures the ability of the hospital to pay off all debt with cash generated by operating and nonoperating activities	(Total Surplus (Deficit) plus Depreciation and Amortization Expense)/Total Liabilities
Average Age of Plant	Measures the relative age of fixed assets	Accumulated Depreciation/ Depreciation Expense

Hospitals As Integrated Systems of Care

Many of New Hampshire's hospitals have developed into systems of care with complex corporate organizational structures. Hospitals may be owned by a holding company or may themselves own other subsidiaries. (The hospital corporate organization charts will be made available with these financial narratives at a future date.) These individual analyses that follow attempt to isolate the hospital entity to the extent possible as the basis of analysis. This distinction is important because subsidiaries that operate within a larger hospital system may operate at higher or lower levels of financial performance than the hospital. For example, a home health agency impacted by Medicare reimbursement changes that result in an operating deficit might be directly supported by the hospital. On the other hand, an ambulatory surgical unit (or another entity within the holding company of which the hospital is a part of) with a healthy financial performance could have a positive impact on the hospital with an operating deficit.

[2] (Operating Expenses Less Depreciation Expense Less Bad Debt Expense)/365

Charity Care and Community Benefits

Each hospital financial analysis includes a section on Charity Care and Community Benefits. This section of the hospital financial narrative is more exploratory than are the other standardized financial benchmarks. For further background information or for specific information on how these measures were calculated, please see the *Analysis of Health Care Charitable Trusts in the State of New Hampshire.*

In 1999, the legislature passed the New Hampshire Community Benefits law (SB 69), which requires that all non-profit hospitals and other health care charitable trusts with $100,000 or more in their total fund balance complete a needs assessment of the communities that they serve. The legislation also calls for the hospitals and others to consult with members of the public within their communities to discuss what the provider has done in the past to meet community needs, what it plans to do in the future, and then submit the plan to the Attorney General's office.

New Hampshire's law is a reporting statute. It does not contain a dollar value or minimum threshold the non-profit trusts must meet. With this new statute, the hospitals and others are working to improve the measurement of charity care (free care) and other community benefits they provide in return for exemption from local, state and federal taxes. Since this law is relatively new, the audited financial statements used for the purpose of this community benefit analysis may not yet fully reflect the dollar value of community benefits beyond charges foregone for charity care or necessary but unprofitable services. New Hampshire's definition of community benefits is very broad; it includes free care but does not include bad debt or shortfalls in reimbursement from the Medicare and Medicaid programs.

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For More Information

Questions or comment concerning this report may be directed to the Office of Planning and Research at 603-271-5254.

COTTAGE HOSPITAL, WOODSVILLE, NEW HAMPSHIRE 1993 - 1999 FINANCIAL ANALYSIS

Cottage Hospital is a small, 38-bed, acute-care facility in Grafton County[3]. As of 1997, Medicare followed by private insurers represented the largest percentage of payers for inpatient discharges (58 and 26%, respectively)[4]. As of 1998, the only affiliate of the hospital is a physician hospital organization, formed in 1995.

Summary of Financial Analysis 1993-98

The financial performance of this small hospital was strong due to dramatic increases in profitability, which allowed the hospital to build liquidity and decrease its level of financial risk over the six-year period. Profitability is driven by high operating margins, though the ability to maintain margins at the same level as recent years will depend on the hospital's ability to continue to maintain a relatively high markup that has not been offset by deductions from payers.

Cash Flow Analysis 1993-98

This small hospital generated all of its cash internally over the period. Cash from net income was generated mainly from operating income (29% of total cash sources) as operating margins improved over the period and decreased the importance of nonoperating revenues, which generated 14% of the hospital's total cash.

The hospital invested most of its cash in property, plant and equipment (PP&E), which represented 55% of total cash uses. This level of investment was 31% greater than depreciation expense and seems adequate given the young and decreasing average age of plant of 6.7 years in 1998. The hospital spent one-third of its cash increasing liquidity: 19% was invested in marketable securities, and 12% was used to increase the cash account balance. This strategy allowed the hospital to build its cash balances, though given its small size, it was not able to generate the large amount of liquidity that some other hospitals in the state were able to build during the period. Although long-term debt was issued during the period, the hospital repaid more than it issued, improving its solvency over this period.

This is a financially healthy pattern of cash sources and uses, reflecting the use of improved margins to build liquidity and solvency, improving overall financial performance.

Ratio Analysis 1993-98[5]

Profitability

Profitability is strong and dramatically improved over the period, with total margins increasing from break even to 12%. Steady improvements in the operating margin drove this trend. Operating margins improved from –1.0 to 9% following steady growth in the markup of charges over cost that offset the deductions to revenues from payer discounts and contractuals (deductible). The strong growth in operating margin between 1997 and 1998 was a result of continued growth in the markup and a decrease in the deductible.

The hospital did not need to rely on nonoperating activities to enhance its bottom line and nonoperating revenue contributions only represented about a quarter of the total margin in recent

[3] The 1998 American Hospital Association Guide.
[4] 1997 data from the State of New Hampshire Department of Health and Human Services.
[5] NH state medians from The 1998-99 Almanac of Hospital Financial & Operating Indicators.

years. Realized gains on the sale of investments comprised almost half of the nonoperating revenue contribution.

Liquidity

The current ratio illustrates that the hospital has sufficient resources to cover short-term obligations, though it is in the lowest tenth percentile in the state by 1997 according to this measure. The five-fold growth in the third party settlement account, an estimated liability, may have affected this measure. This large increase in reserves is another sign of the strong profitability of Cottage.

Liquidity improved dramatically, as shown by the increase in the days cash on hand measure from 2 days to 37 days in 1998. With unrestricted marketable securities, the hospital had 122 days of unrestricted cash by 1998, a three-fold increase from 1993.

Improved liquidity allowed the hospital to reduce the amount of time it took to pay its vendors – from 52 to 27 days. Though the days in accounts receivable increased slightly – from 51 to 54 days – this collection period is comparable to other hospitals in the state as of 1997.

Capital Structure

Cottage hospital reduced its financial risk considerably over the period as evidenced by the increase in the equity financing ratio from 50 to 71%. In fact, by 1998 it paid off most of its long-term borrowings, with a long term debt-to-equity ratio of only 4%. The repayment of borrowings and increased profitability both contributed to this improvement in solvency.

As debt was retired and profitability increased, the hospital's ability to service its debt increased dramatically. By 1998, debt coverage ratios show that the hospital can easily make its debt principal and interest payments and that it generates enough cash flows from net income to cover 75% of its outstanding debt.

Charity Care and Community Benefits

Charity care reported as charges forgone represented less than 1-1.8% of gross patient service revenues from 1993 to 1998 and declined in1998. This amount of charity care met the estimated value of the hospital's tax exemption in 1993. With the inclusion of 50% bad debt, the hospital met its estimated tax benefit from 1994 to 1996. After 1996, in the hospital's most profitable years, charity care and 100% bad debt met 80% of this benchmark, even with the inclusion of 100% bad debt.

The hospital did not report additional quantifiable charity care in the footnotes to its financial statements.

According to the 1998 American Hospital Association Guide, Cottage Hospital did not offer services, such as a NICU or trauma center, that may be considered an additional charitable benefit to the community.

Cash Flow Analysis 1993 – 1999

Between 1993 and 1999, this hospital generated 72% of its cash internally. Operating income represented 23%, non-operating income provided 12%, and depreciation provided 37% of total cash generated.

The hospital invested most of its cash in property, plant, and equipment (PP&E) 56% of its total cash uses. The PP&E investment was 19% greater than depreciation expense. Use of cash for marketable securities and increasing cash was 38%.

1999 Ratio Analysis

Profitability

Total margin declined from 12% in 1998 to 3% in 1999. This was attributable primarily to a decline in the hospital's operating margin from 9% in 1998 to 2% in 1999.

Total operating expense grew 9% while the total operating revenue had 0% growth. Although the operating margin decreased to 2%, the total operating margins were still between the 50th percentile and 75th percentile of the total 1999 New Hampshire hospital industry.

Liquidity

The current ratio increased from 2.33 to 3.98. This was due primarily to a decrease in current long-term debt from $1.1 million to $0.1 million. The hospital issued new debt of $3.3 million in order to pay off old debt, as well as to renovate.

Days current cash on hand decreased from 37 days cash in 1998 to 29 days cash in 1999. However, once unrestricted marketable securities were included, the hospital had 112 days cash in 1999. The hospital has maintained the 122 days cash level since 1997.

The hospital improved collections. The accounts receivable days decreased from 54 days in 1998 to 47.6 days in 1999. In addition, the average pay period increased from 27 days to 35 days.

Capital Structure

The hospital increased its financial risk. Its equity financing ratio decreased from 71% in 1998 to 59% in 1999. It acquired new long-term borrowings that resulted in an increase in the long-term debt to equity ratio from 4% in 1998 to 45% in 1999.

Total debt service coverage (10.21 to 4.31) and the debt service coverage with operating income only (8.62 to 3.72) declined. This was due to an increase in borrowing and decrease in profitability. However, the hospital was able to cover its debt service with its operating results.

Charity Care and Community Benefits

Charity care reported as forgone charges represented 2% of gross patient service revenue. Its bad debt charged decreased from 3.53% to 1.90%.

Summary

The financial position of this small hospital was strong relative to the New Hampshire hospital industry. This was due to the profit accumulated since 1994. However, 1999 operating results were down from prior years, due to zero growth in revenues and a 9% increase in operating expenses.

Source: Audited Financial Statements. Prepared by Nancy M. Kane, D.B.A. Harvard School of Public Health